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- DEPARTMENT OF BOTANY, UNIVERSITY OF GEORGIA.

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NOTES ON THE DISTRIBUTION OF OHIO COMPOS-ITAE: II. EUPATORIEAE, SENECIONEAE, CYNAREAE, CICHORIEAE

ROBERT W. LONG

This is the second paper of a series of three that presents some results of a recent study of Ohio Compositae. In part I¹ it was noted that plants discussed in these reports are ones whose occurrence in Ohio is questionable, judging from information given in Gray's Manual (1950) and The New Britton and Brown Illustrated Flora (1952). For the present, the nomenclature is derived chiefly from Gray's Manual, but this does not imply it is necessarily the best treatment for the taxa listed.

All specimens and county records cited here are deposited in the Herbarium of The Ohio State University, and the identifications have been verified by the writer.

EUPATORIEAE

Eupatorium album L. var. glandulosum (Michx.) DC. This variety is easily separated from the typical one by the occurrence of minute, dark glands on the phyllaries; thus, the variety is quite distinct. Its presence in southern Ohio represents a northward extension of the range given by Fernald. COLLECTION DATA: Jackson Co., Liberty Twp.,

ROBERT W. LONG. Notes on the distribution of Ohio Compositae: I. Heliantheae, Anthemidae. RHODORA 60:125-128. 1958.

Big Rock, Leslie Pontius and Floyd Bartley, August 27, 1933. Other collections from Scioto County.

Eupatorium rotundifolium L. var. rotundifolium. The distribution of this plant is apparently limited to the southeastern quarter of the state on the Allegheny Plateau. These collections, however, are evidently from the northwestern edge of the range for the species, judging from accounts in the manuals. COLLECTION DATA: Scioto Co., Nile Twp., Conrad Roth, August 26, 1956. Other collections examined from Fairfield and Hocking counties.

Eupatorium rotundifolium L. var. ovatum (Bigel.) Torr. That there are two recognizable varieties of this species in Ohio is clearly apparent from the specimens examined. Both manuals agree that two can be distinguished, with *E. pubescens* Muhl. being a synonym for var. ovatum. Recent collections place both varieties in southcentral counties and for var. ovatum this record will be a range extension. COLLECTION DATA: Hocking Co., "Neotoma", Gareth Gilbert, August 12, 1955. Also, collections from Jackson County.

Liatris borealis Nutt. The collections of this plant are very near L. scariosa (L.) Willd. If they are correctly identified, then Ohio records constitute a westward range extension. The following are provisionally placed in this species. collection data: Adams Co., Andrews School Prairie, H. R. DeSelm, September 18, 1952. Other county records for Erie, Henry, Pike, Ross, and Wood counties.

Liatris punctata Hook. The single collection suggests that the species occurs only rarely. This is considerably east of its chief distribution, that being in the dry prairies from Canada to Texas. The specimen does not appear to be of var. nebraskana Gaiser. collection data: Franklin Co., Clintonville, John H. Schaffner, October 3, 1903.

Liatris scariosa (L.) Willd. Ohio plants appear to be relatively abundant, but predominantly in the southern counties which extends the range of the species westward. Intergrades to *L. borealis*, and *L. aspera* Michx. were found. The following collections have been provisionally traced to *L. scariosa* as described in Gray's Manual. COLLECTION DATA: Vinton Co., Vinton Twp., Sec. 22, roadside on ridgetop, *Janice Beatley*, August 30, 1952. Other collections from Adams, Athens, Erie, Fairfield, Franklin, Fulton, Jackson, Meigs, Perry, Pike, Ross, and Scioto counties.

SENECIONEAE

Senecio antennariifolius Britt. The presence of this species in Ohio is a significant westward range extension from the general area of distribution, as given in both manuals. Schaffner does not give it in either the Revised Catalogue or in The Field Manual of the Flora of Ohio. All collections examined had been made since 1950. Three collections

intergrade to S. plattensis Nutt. collection data: Hocking Co., Cedar Falls, Floyd Bartley and Lawrence E. Hicks, June, 1956.

Senecio Smallii Britt. Although this is a southern species, ranging into Kentucky and Pennsylvania, collections have been seen from several parts of the state. Possibly the species has migrated only recently into Ohio, or has been introduced as a weed. Schaffner does not list it and all collections examined were made since 1949. One specimen (Geauga Co.) intergrades to S. pauperculus Michx. in stem and inflorescence characteristics. COLLECTION DATA: Lawrence Co., in old field 2 mi. west of Oak Ridge Furnace, Lawrence Hicks and Floyd Bartley, May 30, 1954. Also, specimens were examined from Adams, Cuyahoga, Geauga and Summit counties.

CYNAREAE

Centaurea repens L. This is a distinctive star-thistle, with bushy branches bearing small, linear leaves abundant to the numerous heads that terminate the branches. It is represented in Ohio by at least a single collection and this is an important eastward range extension. COLLECTION DATA: Clinton Co., collected along railroad tracks near New Vienna, a large patch, *Katie M. Roads*, June 27, 1939.

Cirsium arvense (L.) Scop. var integrifolium Wimm, and Grab. Two collections have been made in widely-separated parts of the state. According to published accounts, these locales are considerably west and south of the usual range for the variety. collection data: Cuyahoga Co., North Olmstead, *Freda Detmers*, August 4, 1925. Also, a collection was seen from Logan county.

Cirsium carolinianum (Walt.) Fern. and Schub. The omission of this species from Schaffner's published accounts of the flora was owing to his identification of Ohio collections as *C. virginianum* (L.) Michx. The specimens seen, however, clearly belong to *C. carolinianum* judging from the size of the involucre and number of leaves. Two county records extend the range of the species into central Ohio. COLLECTION DATA: Pike Co., Floyd Bartley and Leslie Pontius, June 7, 1945. Other collections examined from Franklin, Madison, and Scioto counties.

Cirsium Hillii (Canby) Fern. This species is distinguished from the common Ohio thistle *C. pumilum* (Nutt.) Spreng. by the presence of short prickles on the outer phyllaries that also have a dark band present running the length of the phyllary. Schaffner includes it in his Field Manual of the Flora of Ohio, but not in the Revised Catalogue. The single head of the specimen examined was unusually large. COLLECTION DATA: Coshocton Co., in dry open fields, leaves green beneath, location N. A. E. W., *Harold N. Moldenke 13232*, July 15, 1942.

CICHORIEAE

Krigia Dandelion (L.) Nutt. Ohio records result in a northward and eastward range extension. The single collection, however, comes from

an area that several authors have commented on as being a peculiar mosaic of prairie and Allegheny vegetation which is not typical for the state. The specimen appeared not unusual, morphologically, judging from the description. collection data: Adams Co., sw. corner Oliver Twp., post oak-white oak woods. E. Lucy Braun, May 18, 1954.

Leontodon autumnalis L. var. autumnalis. The plant has become established as a weed of northern counties, and its occurrence represents an eastward and southward range extension. collection data: Summit Co., lawn weed, Cannon road 3/4 mi. e. of Twinsburg, Ervin M. Herrick, August 28, 1955. Other specimens examined from Ashtabula, Franklin, Lake, and Medina counties.

Leontodon autumnalis var. pratensis (Link) Koch. A single collection was seen of this variety, although one might expect to find it to be more abundant, especially in the northern part of the state. collection data: Ashtabula Co., Trumbull, L. E. Hicks, June 10, 1931.—
DEPARTMENT OF BOTANY, OHIO WESLEYAN UNIVERSITY, DELAWARE, OHIO.

THE BALANOPHORACEAE IN THE CARIBBEAN FLORA¹

RICHARD A. HOWARD

This small family of root parasites is represented in the Antilles by two genera, *Scybalium* and *Helosis*. One species of *Scybalium*, *S. jamaicense*, has been found in Cuba, Jamaica, Hispaniola and Puerto Rico.

The second genus, *Helosis*, consists of three species known from South America and Central America. Sandwith (Kew Bull. 1931:59. 1931.) and Harms in his monograph (Pflanzenfam. 2nd ed. 16b:321. 1935.) suggest that one of them, *H. cayennensis*, may possibly occur in Guatemala and Cuba as well as in northern South America. Standley and Steyermark (Flora of Guatemala, Fieldiana, Bot. 24:93. 1946.) refer the Guatemalan specimens to *Helosis mexicana*, but state that "three species have been described, all of them perhaps to be reduced to *H. cayennensis* (Swartz) Spreng. of northern South America. Only the following [*H. mexicana*] is known from Central America." The specific differences suggested by Harms for the three species of *Helosis* do not appear to be substantial taxonomic characters. However,

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